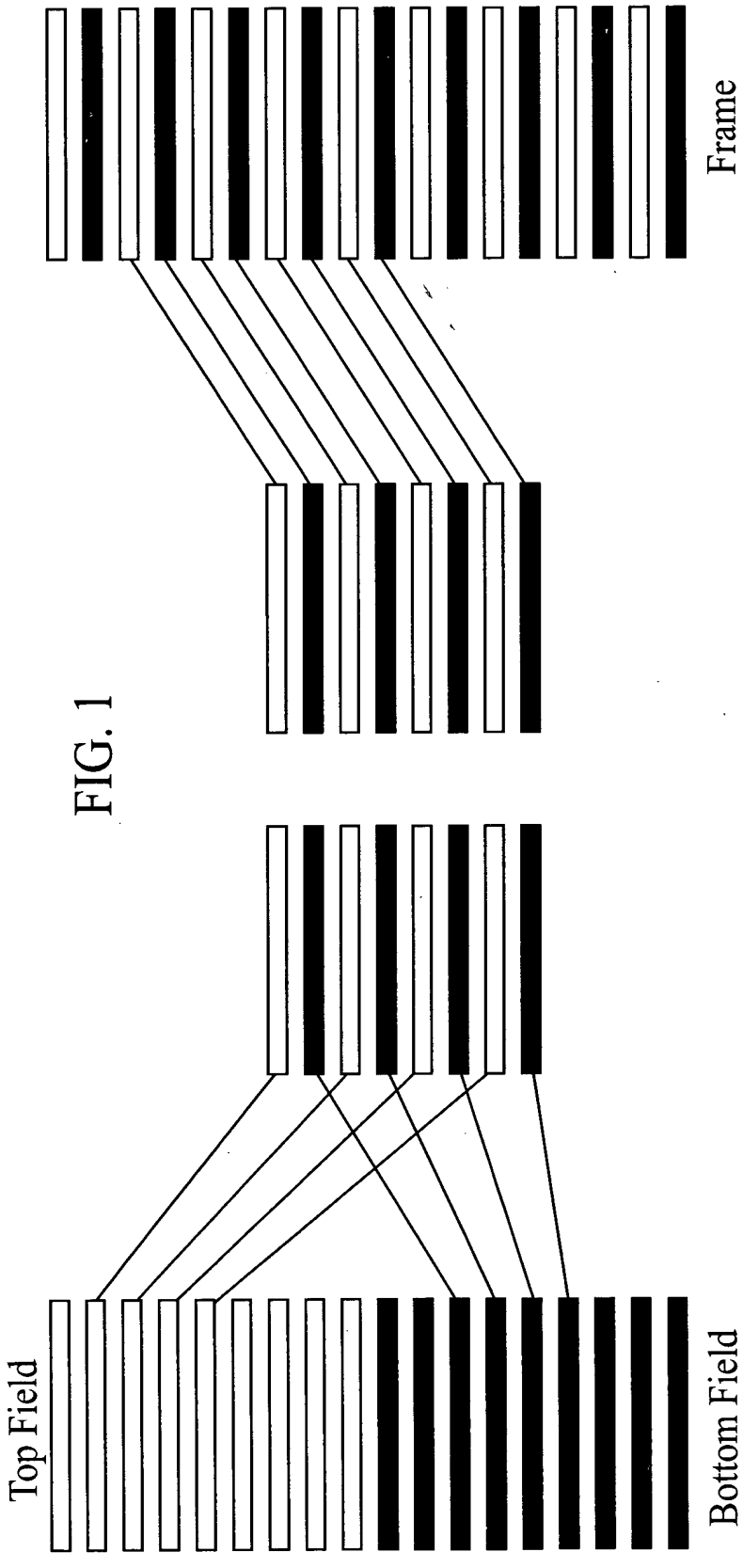


FIG. 1

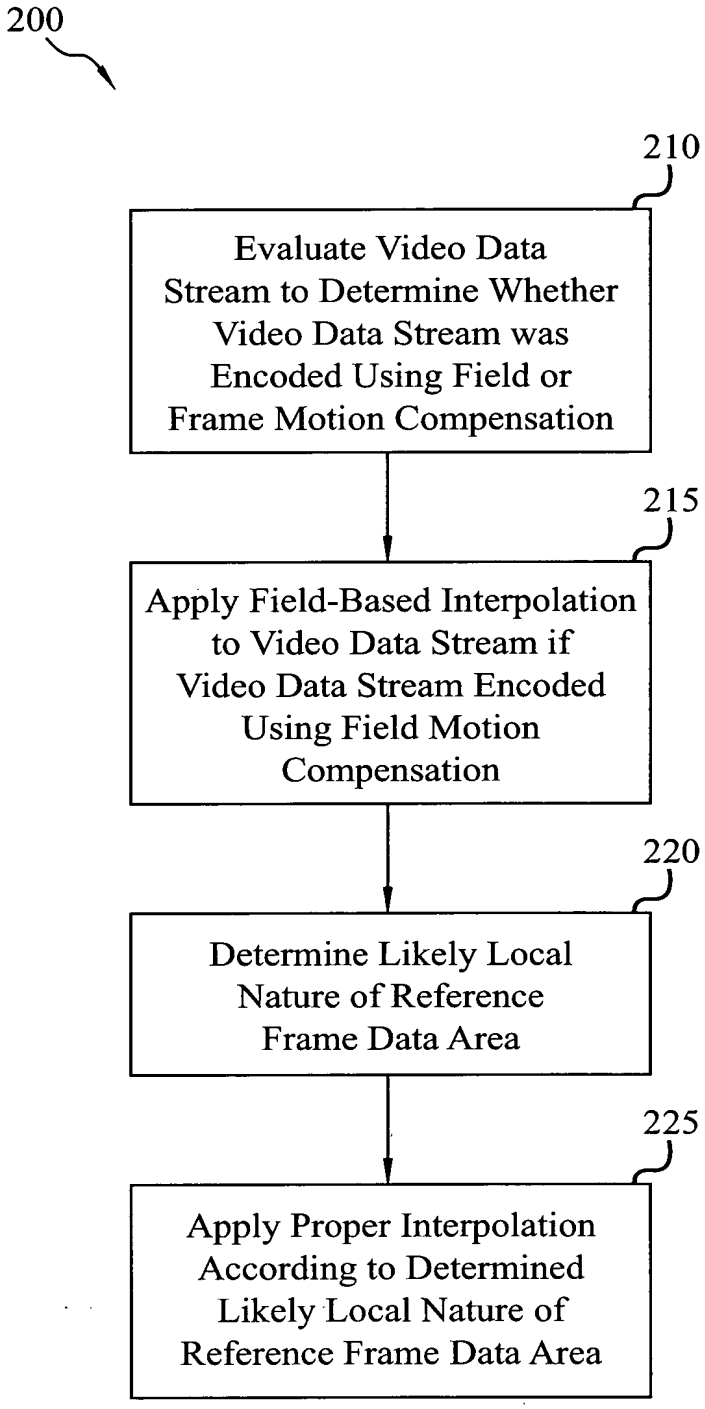

200
210
Evaluate Video Data Stream to Determine Whether Video Data Stream was Encoded Using Field or Frame Motion Compensation
215
Apply Field-Based Interpolation to Video Data Stream if Video Data Stream Encoded Using Field Motion Compensation
220
Determine Likely Local Nature of Reference Frame Data Area
225
Apply Proper Interpolation According to Determined Likely Local Nature of Reference Frame Data Area

FIG. 2

		TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5
Reduced Resolution	dy = MV mod 1	0	1/4	1/2	3/4	0*(1)
Full Resolution	dy = MV mod 2	0	1/2	1	1 1/2	0*(2)

FIG. 3

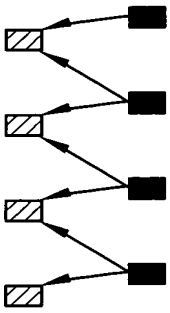
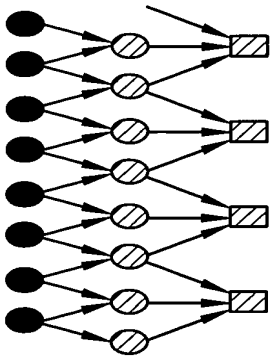
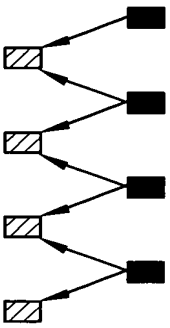
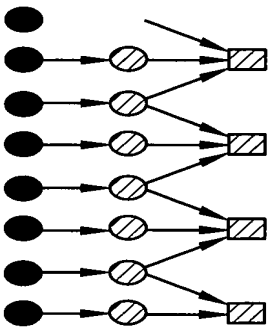
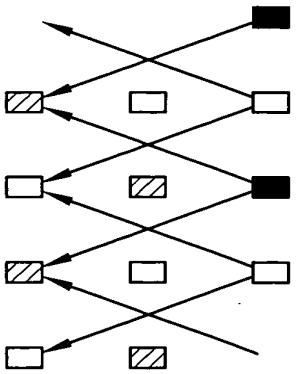
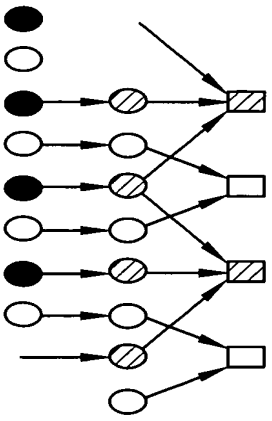
Motion Vector Type	Interpolation Directly in Reduced Resolution	Interpolation in Full Resolution and Downscale
1/2 in Full Resolution 1/4 in Reduced Resolution		
1 in Full Resolution 1/2 in Reduced Resolution		
2 in Full Resolution 1 in Reduced Resolution		

FIG. 4

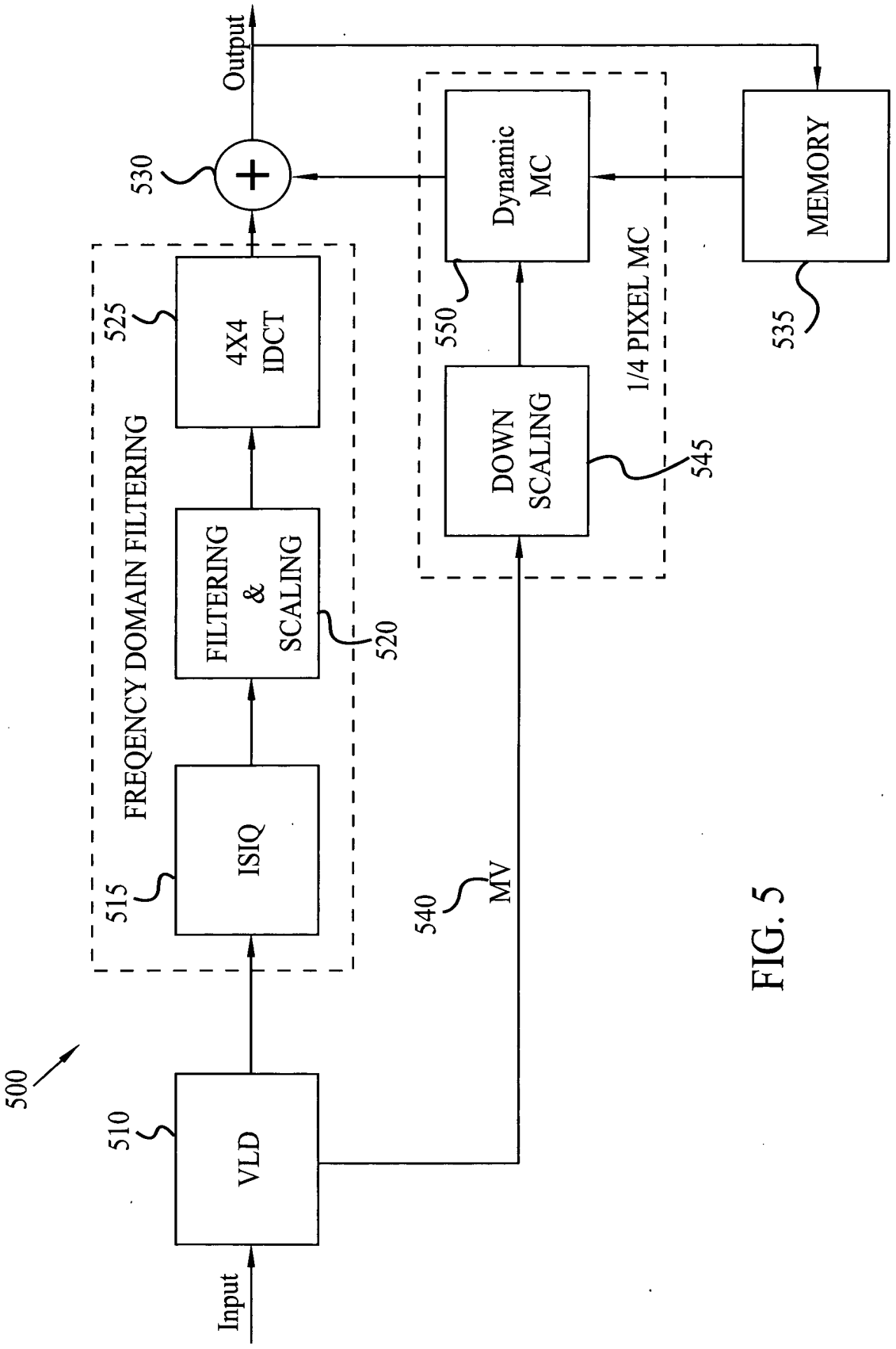

500
Input
510
VLD
515
ISIQ
FREQENCY DOMAIN FILTERING
520
FILTERING & SCALING
525
4X4 IDCT
530
Output
540
MV
1/4 PIXEL MC
545
DOWN SCALING
550
Dynamic MC
535
MEMORY

FIG. 5